

AMENDMENTS TO THE CLAIMS

1. (Currently Amended):

A miniature electric motor comprising
a tubular housing; and
at least one end cap, said end cap having a boss portion fitted inside the housing, a flange which abuts an axial end of the housing, and an engagement portion;
said housing having at least one ~~circumferentially extending~~ finger having a longitudinal axis extending in the circumferential direction which is radially deformed into contact with the engagement portion of the end cap to capture the end cap to the housing;
wherein the engagement portion includes an axially projecting ridge and the finger bears axially onto the ridge to nip the end cap to the housing.

2. (Original) The motor of claim 1, wherein the ridge is substantially circumferentially extending along the engagement portion.

3. (Original) The motor of claim 1, wherein the engagement portion has a substantially planar portion lying in a radial plane of the motor from which the ridge projects axially away from the housing.

4: (Previously Amended) The motor of claim 1, wherein the end cap is a molded resin body and the engagement portion includes a recess formed in the flange and boss portion into which the finger is deformed.

5. (Original) The motor of claim 4, wherein the ridge is formed along the outer peripheral edge of the recess.

6. (Original) The motor of claim 1, wherein the ridge has an outer chamfer for guiding the finger.

7. (Original) The motor of claim 1, wherein the engagement between the ridge and the finger involves at least part shearing of the ridge to accept the finger.

8. (Original) The motor of claim 1, wherein the finger has an axially inner edge which engages the ridge, said inner edge is tapered with respect to a radial plane of the motor.

9. (Original) The motor of claim 1, wherein the housing has an even number of fingers formed as opposing pairs by T-shaped holes in an end portion of the housing.

10. (Original) The motor of claim 9, wherein the end cap has a number of engagement portion corresponding in number to the pairs of fingers and the or each engagement portion accommodates one pair of fingers.

11. (Currently Amended):

A method of connecting an end cap to a tubular housing of a miniature electric motor, the method comprising the steps of

providing an end cap with a flange, a boss portion and at least one engagement portion,

providing a tubular housing with at least one ~~circumferentially-extending~~ finger having a longitudinal axis extending in the circumferential direction,

inserting the boss portion of the end cap into the housing such that the flange abuts an axial end of the housing and the engagement portion is aligned with the finger,

and providing an axially projecting ridge on the engagement portion and deforming the finger radially so that an axially inner edge of the finger axially engages the ridge to prevent axial movement of the end cap with respect to the housing.

12: (Previously Amended) The method of claim 11, wherein a part of the ridge is sheared by the finger thereby firmly holding the end cap to the housing.

13. (Original) The method of claim 11, including the step of providing a tapered surface to the axially inner edge of the finger thus causing a greater axial holding force the more the finger is deformed radially.

14. (Previously Amended) The method of claim 11, including the steps of providing a plurality of pairs of said fingers and radially deforming each pair of fingers into a respective engagement portion of the end cap, each finger having an axially inner edge which extends at an incline to a plane orthogonal to an axis of the housing, the axially inner edge being brought into contact with an axially outer surface of the ridge by radially deforming and continuing to radially deform the finger causing the inner edge of the finger to exert an axial force on the ridge of the engagement portion to clamp the end cap to the housing.

15. (Previously Added) The method of claim 11, further including:
providing a recess in the engagement portion, the recess extending through the flange and into the boss portion;
providing the ridge on an axially inner surface of the recess and extending the ridge along a radially outer peripheral edge of the recess; and
deforming the finger radially into the recess and into axial engagement with the ridge, thereby shearing a part of the ridge.